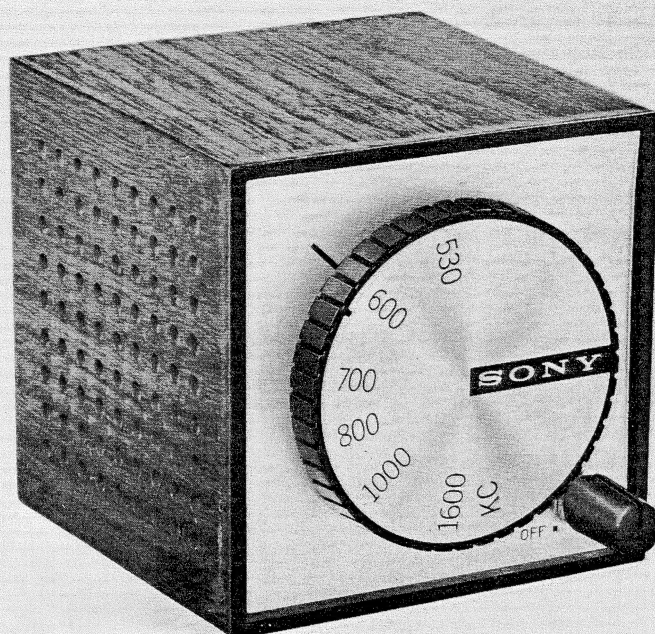


Serial No. 308,001 and After

TR-1819



Specifications

Circuit :	6 Transistor Superheterodyne
Frequency Coverage :	530~1,605 Kc (566~187 m)
Intermediate Frequency :	455 Kc
Antenna System :	Built-in Ferrite Bar Antenna
Maximum Sensitivity :	40 dB (100 μ V/m)
(at 10 mW output)	
Selectivity :	23 dB at 10 Kc off resonance, at 1,400 Kc
Output Power :	130 mW (undistorted) 200 mW (maximum)
Current Drain :	12 mA at zero signal, 73 mA at 130 mW output
Speaker :	2 $\frac{3}{4}$ " (7 cm), PM dynamic, 8 Ω
Power Source :	Three Size "AA or Z" Penlight Batteries (4.5 Volts in total)
Dimensions :	3 $\frac{5}{16}$ " \times 3 $\frac{5}{16}$ " \times 3 $\frac{1}{4}$ " (84 \times 84 \times 82 mm)
Weight :	0.77 lb. (350 g.)

SONY®

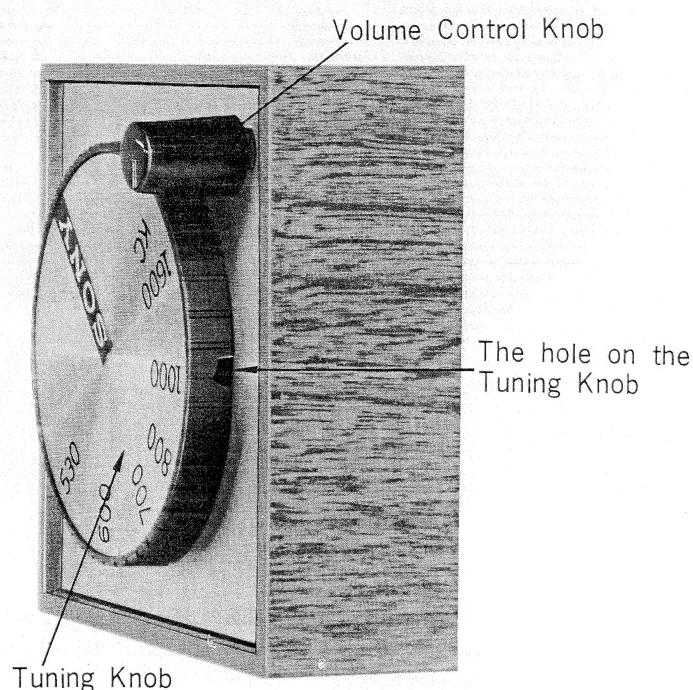
SERVICING GUIDE

Removal of Chassis

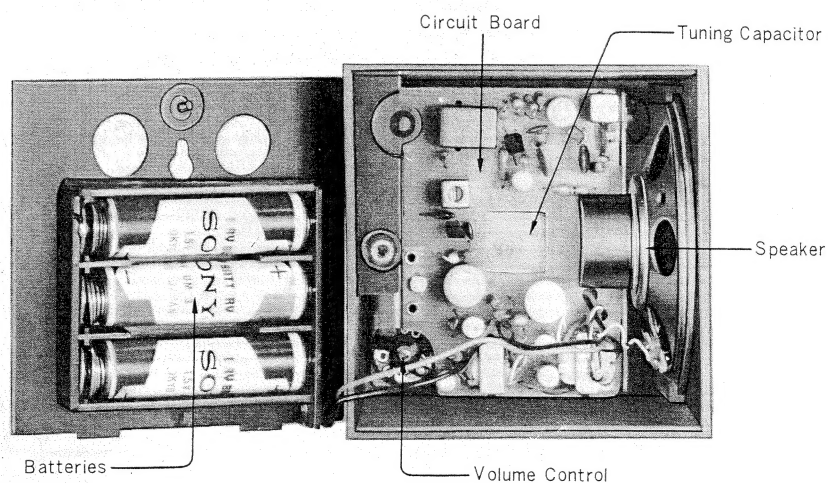
- (1) Remove the Volume Control Knob by pulling it straight out.
- (2) Remove the Tuning Knob by unscrewing the Screw which can be seen through the hole on the Tuning Knob shown in Fig. 1.
- (3) Remove the three Chassis Holding Screws on the front side of the Cabinet.
- (4) Remove the Back Cover Holding Screw.
- (5) Pull the Speaker out toward you to remove it.
- (6) Remove the Chassis from the Cabinet gently taking care not to cut the leads.

Removal of Circuit Board

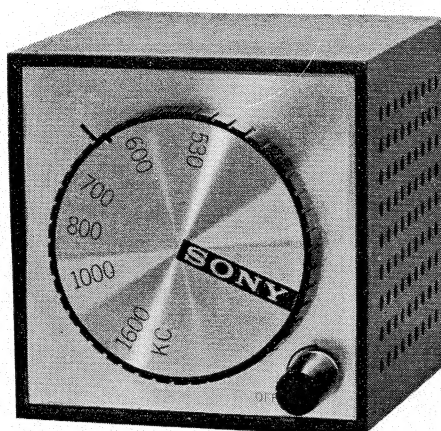
- (1) Remove the Screw at the Circuit Board.
- (2) Remove the two Tuning Capacitor Holding Screws.



(Fig. 1)



(Fig. 2)



Specifications

Circuit :	6 Transistor Superheterodyne
Frequency Coverage :	530—1,605 Kc (566—187 m)
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(at 10 mW output)	
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	200 mW (maximum)
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Speaker :	2-3/4" (7 cm), PM dynamic, 8 Ω
Power Source :	Three Size " AA or Z " Penlight Batteries
	(4.5 Volts in total)
Dimensions :	3-5/16" \times 3-5/16" \times 3-1/4"
	(84 \times 84 \times 82 mm)
Weight :	0.77 lb. (350 g.)

Adjustments

a) Frequency Coverage Adjustment

Lower Limit	Adjust	Upper Limit	Adjust
520 Kc	Core of OSC Coil (L_2)	1,680 Kc	OSC Trimmer (C_{2-2})

b) Tracking Adjustment

Lower Checking Point	Adjust	Upper Checking Point	Adjust
620 Kc	Position of ANT Coil (L_1)	1,400 Kc	ANT Trimmer (C_{2-1})

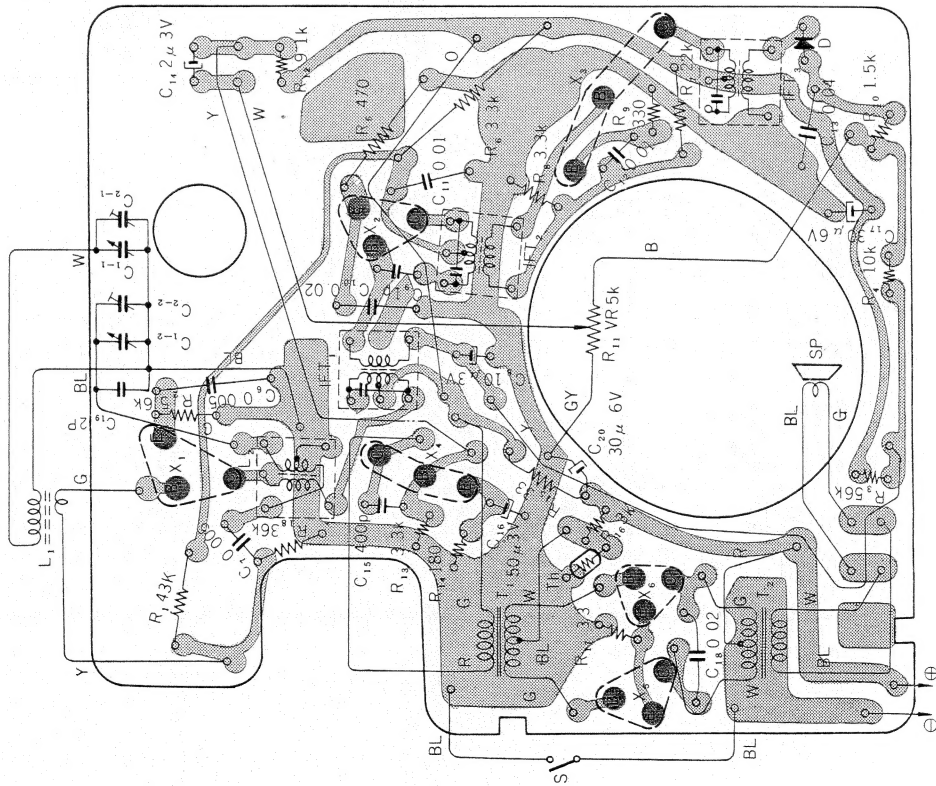
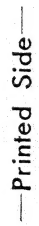
- 4 -



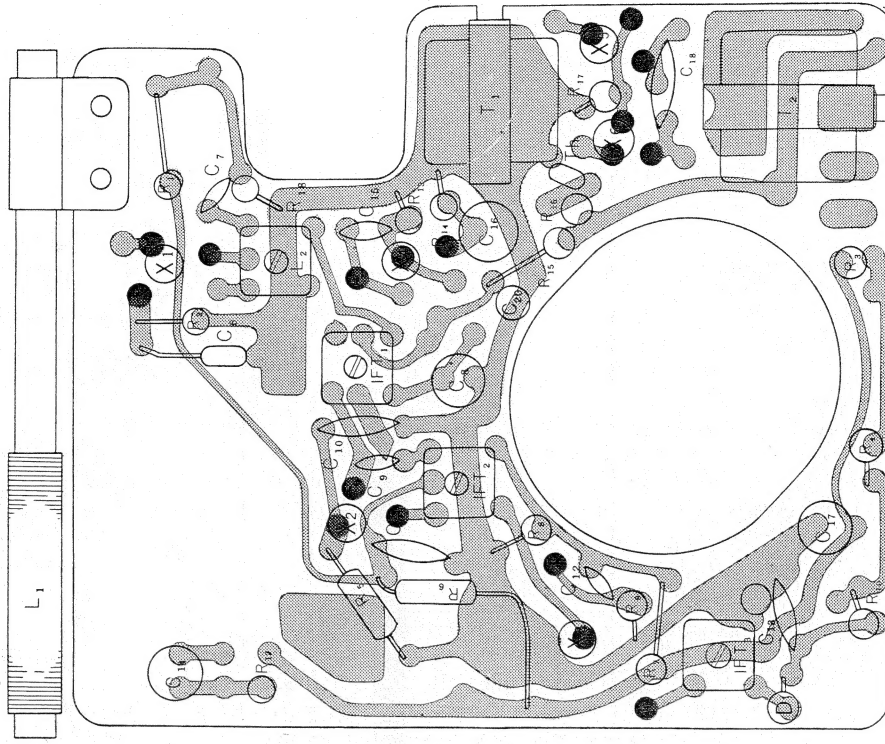
The diagram shows a 4-stage electronic attenuator circuit. It is powered by a 4.5V battery and a switch S. The circuit includes four vacuum tubes, labeled X₁, X₂, X₃, and X₄, each connected to a transformer. The input is connected to X₁ through a 1.2V source and a 5.6k resistor R₂. The output of X₁ is connected to X₂ through a 215 μA source and a 5.6k resistor R₃. The output of X₂ is connected to X₃ through a 600 μA source and a 470 ohm resistor R₅. The output of X₃ is connected to X₄ through an 880 μA source and a 330 ohm resistor R₉. The output of X₄ is connected to the final output through a 0.87V source and a 180 ohm resistor R₁₄. The circuit also includes a 4.8mA source and a 3.3 ohm resistor R₁₇. The total resistance is R₄ + R₁₀.

Mounting Diagram

Up to Serial No. 79,000



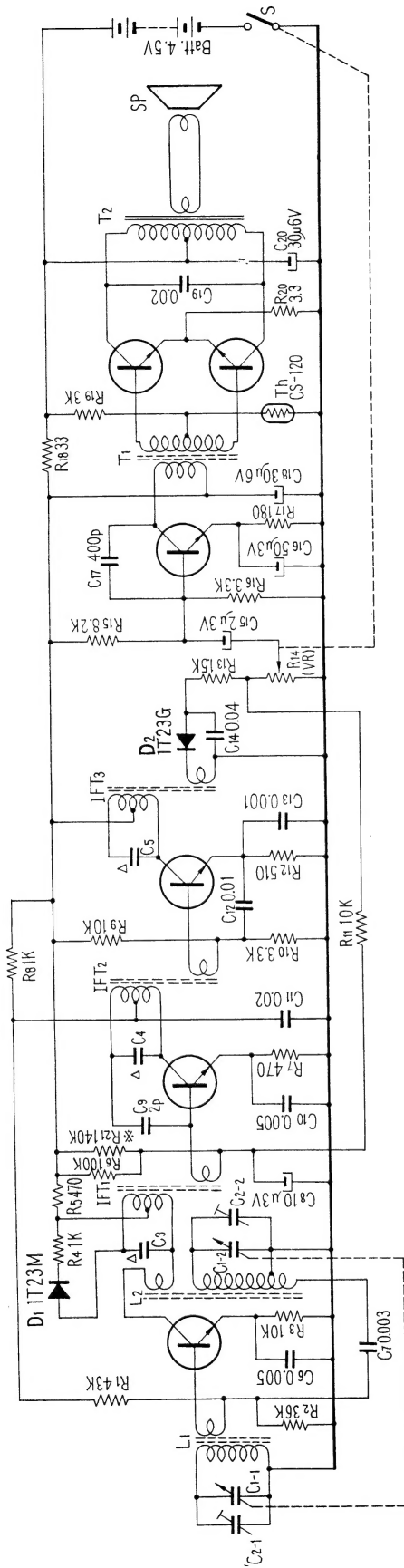
—Parts Side—



After Serial No. 79,001

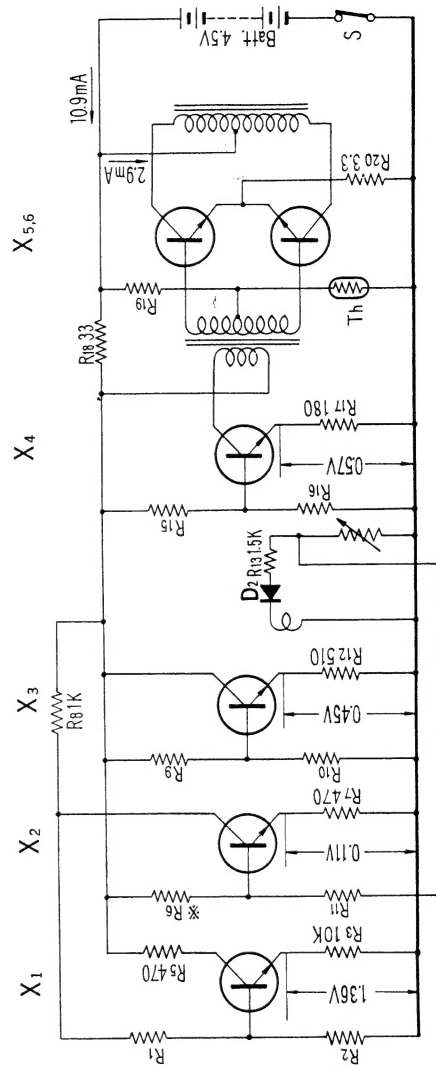
Schematic Diagram

X₁ 2SC403 X₂ 2SC402 X₃ 2SC402 X₄ 2SC401 X_{5,6} 2SD65



※.....To be adjusted
 △.....Capacitors marked with △ are built in relative IF Transformers.

Voltage and Current Distribution Chart at Zero Signal



After Serial No. 79,001

Mounting Diagram

— Printed Side —
— Parts Side —

